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## U.S. Nuclear Cooperation With India: Issues for Congress

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Sharon Squassoni  
Specialist in National Defense  
Foreign Affairs, Defense, and Trade Division

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# U. S. Nuclear Cooperation With India: Issues for Congress

## Summary

On July 18, 2005, President Bush announced a global partnership with India to promote stability, democracy, prosperity and peace. The desire to transform relations with India, according to Administration officials, is “founded upon a strategic vision that transcends even today’s most pressing security concerns.” President Bush said he would “work to achieve full civil nuclear energy cooperation with India” and would “also seek agreement from Congress to adjust U.S. laws and policies.”

Administration officials have described the agreement as a “win” for nonproliferation because it would bring India into the nonproliferation mainstream. For thirty years, India has remained outside the mainstream: it rejected the Nuclear Nonproliferation Treaty (NPT) as discriminatory and exploded a “peaceful” nuclear device in 1974 that convinced the world of the need for greater restrictions on nuclear trade. The United States created the Nuclear Suppliers Group as a direct response to India’s test, halted nuclear exports to India a few years later, and worked to convince other states to do the same.

Nonproliferation experts have suggested that potential costs to U.S. and global nonproliferation policy of bringing India into the nonproliferation mainstream in this manner may far exceed the benefits. For example, at a time when the United States has called for all states to strengthen their domestic export control laws and for tighter multilateral controls, U.S. nuclear cooperation with India would require loosening its own nuclear export legislation, as well as creating a Nuclear Suppliers Group exception. It would reverse nearly three decades of U.S. nonproliferation policy and practice towards India. Some believe this agreement undercuts the basic bargain of the NPT, could undermine hard-won restrictions on nuclear supply, and could prompt some suppliers, like China, to justify supplying other states outside the NPT regime, like Pakistan.

India does not meet nonproliferation criteria for nuclear cooperation under current U.S. law (Atomic Energy Act; P.L. 95-242; 42 U.S.C. 2153 et seq.). As such, the President would have to exempt the agreement from those nonproliferation criteria and submit nuclear exports for congressional review on an annual basis. The President would also have to determine, subject to congressional review, that continued exports were necessary, even though India has tested nuclear weapons and continues its nuclear weapons program. Congress would have to approve such an agreement with a joint resolution. The Administration, which might propose legislation to Congress in early 2006, reportedly prefers to create an exception for India to existing provisions of law through stand-alone legislation.

Congress has held four hearings thus far on the global partnership. Some issues raised at those hearings included India’s relationship with Iran and its support (or lack thereof) for bringing Iran before the U.N. Security Council, whether nuclear cooperation is an appropriate “carrot” for a much broader strategic relationship, and strategies for strengthening the nonproliferation benefits of such an agreement. This report will be updated as necessary.

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# U. S. Nuclear Cooperation With India: Issues for Congress

## Background

The United States actively promoted nuclear energy cooperation with India from the mid-1950s, building nuclear power reactors (Tarapur), providing heavy water for the CIRUS research reactor, and allowing Indian scientists to study at U.S. nuclear laboratories. Although India was active in negotiations of the 1968 Nuclear Nonproliferation Treaty (NPT), India refused to join the NPT on grounds that it was discriminatory. The “peaceful” nuclear test in 1974 demonstrated that nuclear technology transferred for peaceful purposes could be used to produce nuclear weapons.<sup>1</sup> In the United States, the Congress responded by passing the Nuclear Non-Proliferation Act of 1978 (NNPA, P.L. 95-242), which imposed tough new requirements for U.S. nuclear exports to non-nuclear-weapon states — full-scope safeguards and termination of exports if such a state detonates a nuclear explosive device or engages in activities related to acquiring or manufacturing nuclear weapons, among other things.<sup>2</sup> Internationally, the United States created the Nuclear Suppliers Group (NSG) in 1975 to implement nuclear export controls. The NSG published guidelines in 1978 “to apply to nuclear transfers for peaceful purposes to help ensure that such transfers would not be diverted to unsafeguarded nuclear fuel cycle or nuclear explosive activities.”<sup>3</sup>

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<sup>1</sup> For an excellent analysis of the proliferation implications of U.S. nuclear exports to India, see Gary Milhollin, “Stopping the Indian Bomb,” *The American Journal of International Law*, July 1987, 81 A.J.I.L. 593. See [<http://www.wisconsinproject.org/pubs/articles/1987/stoppingindianbomb.htm>].

<sup>2</sup> The NNPA, in part, amended the Atomic Energy Act of 1954. See 42 U.S.C. 2151 et seq. Prior to the 1970 NPT, safeguards (inspections, material protection, control and accounting) were applied to specific facilities or materials (known as INFCIRC/66-type agreements). The NPT required safeguards on all nuclear material in all peaceful nuclear activities for non-nuclear-weapon-state parties (those states not having detonated a nuclear explosive device prior to Jan. 1, 1967).

<sup>3</sup> IAEA Document INFCIRC/254, *Guidelines for Transfers of Nuclear-related Dual-use Equipment, Materials, Software, and Related Technology*. Part 1 covers “trigger list” items: those especially designed or prepared for nuclear use: (i) nuclear material; (ii) nuclear reactors and equipment; (iii) non-nuclear material for reactors; (iv) plant and equipment for reprocessing, enrichment and conversion of nuclear material and for fuel fabrication and heavy water production; and (v) associated technology. Part 2 covers dual-use items. Additional NSG criteria for dual-use exports include NPT membership and/or full-scope safeguards agreement; appropriate end-use; whether the technology would be used in a reprocessing or enrichment facility; the state’s support for nonproliferation; and the risk of (continued...)

Conditioning U.S. nuclear exports on non-nuclear-weapon states having full-scope safeguards created a problem particularly for India's safeguarded Tarapur reactors. When the NNPA was enacted, the United States was supplying low-enriched uranium (LEU) fuel. The Carter Administration exported two more shipments under executive order after the Nuclear Regulatory Commission (NRC) refused to approve an export license on nonproliferation conditions. Given slim support in Congress, no more exports were attempted after 1980. France supplied fuel under the terms of the U.S. agreement with India until France also adopted a full-scope safeguards requirement (1984 to 1995). After the NSG adopted the full-scope safeguards condition in 1992, China picked up the slack, and Russia supplied fuel from 2001 to 2004.<sup>4</sup> The issue of LEU fuel for Tarapur became one of pride for the Indians, particularly since their other reactors use natural uranium and they reportedly do not have enough enrichment capability to supply Tarapur with fuel. Although the NPT requires safeguards on items going to non-nuclear weapon states, it does not explicitly prohibit nuclear commerce with states outside the NPT. In 1995, at the NPT Extension Conference, states supported the principle that non-NPT parties should not be eligible for the same kinds of assistance as NPT parties in good standing.

## Global Partnership<sup>5</sup>

The Bush Administration had been considering a strategic partnership with India as early as 2001. Indian officials identified their growing energy needs as an area for cooperation, particularly in nuclear energy. The U.S.-India 2004 Next Steps in Strategic Partnership (NSSP) initiative included expanded cooperation in civil nuclear technology as one of three goals. Phase I of the NSSP, completed in September 2004, required addressing proliferation concerns and ensuring compliance with U.S. export controls.<sup>6</sup>

On July 18, 2005, President Bush announced the creation of a global partnership with India in a joint statement with Prime Minister Manmohan Singh.<sup>7</sup> Noting the "significance of civilian nuclear energy for meeting growing global energy demands in a cleaner and more efficient manner," President Bush said he would "work to

<sup>3</sup> (...continued)  
potential nuclear terrorism.

<sup>4</sup> China was not a member of the NSG until 2004. Russia, an NSG member, exported fuel, citing a safety exception, but NSG members objected so strongly that Russia suspended supply in 2004. Russia may be reconsidering. "Russia to Review Tarapur Fuel Decision" South Asian Media Net, May 10, 2005.

<sup>5</sup> See also CRS Report RL33072, *U.S. - India Bilateral Agreements in 2005*, by K. Alan Kronstadt.

<sup>6</sup> See fact sheet on the NSSP at [<http://www.state.gov/r/pa/prs/ps/2004/36290.htm>].

<sup>7</sup> Joint Statement Between President George W. Bush and Prime Minister Manmohan Singh, White House Press Release, July 18, 2005, Washington, D.C. (hereafter cited as "July 18 Joint Statement") available at [<http://www.whitehouse.gov/news/releases/2005/07/20050718-6.html>].

achieve full civil nuclear energy cooperation with India” and would “also seek agreement from Congress to adjust U.S. laws and policies.”

The Joint Statement noted that the United States “will work with friends and allies to adjust international regimes to enable full civil nuclear energy cooperation and trade with India, including but not limited to expeditious consideration of fuel supplies for safeguarded nuclear reactors at Tarapur.” The United States committed to encouraging its partners to consider this request — a reversal in the U.S. position, which has been to ban fuel to Tarapur — and to consulting with its partners on Indian participation in ITER (collaboration on fusion research) and in the Generation IV International Forum for future reactor design.

Prime Minister Singh conveyed that India “would take on the same responsibilities and practices and acquire the same benefits and advantages as other leading countries with advanced nuclear technology, such as the United States.”<sup>8</sup> India agreed to:

- identify and separate its civilian and military nuclear facilities and programs;
- declare its civilian facilities to the International Atomic Energy Agency (IAEA);
- voluntarily place civilian facilities under IAEA safeguards;
- sign an Additional Protocol for civilian facilities;
- continue its unilateral nuclear test moratorium;
- work with the United States to conclude a Fissile Material Cut Off Treaty (FMCT);
- refrain from transferring enrichment and reprocessing technologies to states that do not have them, as well as support international efforts to limit their spread;
- secure its nuclear materials and technology through comprehensive export control legislation and through harmonization and adherence to Missile Technology Control Regime (MTCR) and NSG guidelines.

## Issues for Consideration

The Atomic Energy Act of 1954, as amended, requires Congressional approval and oversight of certain peaceful nuclear cooperation agreements (details described below). As Senator Lugar has noted, “Ultimately the entire Congress ... must determine what effect the Joint Statement will have on U.S. efforts to halt the proliferation of weapons of mass destruction.”<sup>9</sup> Following the July 18, 2005 announcement, Congress has held four hearings so far on the global partnership and

<sup>8</sup> July 18 Joint Statement.

<sup>9</sup> Opening Statement, Chairman Richard G. Lugar, Senate Foreign Relations Committee hearing on “Implications of U.S.-India Nuclear Energy Cooperation,” November 2, 2005 (hereafter referred to as November 2, 2005 SFRC India hearing).

has consulted with Administration on various aspects of the U.S.-India nuclear agreement.<sup>10</sup> The discussion of potential issues for consideration is drawn in part from the four hearings and from the emerging debate.

## Strategy vs. Tactics

The Bush Administration has described its “desire to transform relations with India” as “founded upon a strategic vision that transcends even today’s most pressing security concerns.”<sup>11</sup> There is clearly broad support for cultivating a close relationship with India, yet some members of Congress have suggested that civil nuclear cooperation may not be the most appropriate vehicle for advancing our relationship. In a House International Relations Committee hearing on September 8, 2005, Congressman Jim Leach stated,

I don’t know any member of Congress that doesn’t want to have a warming of relations with the government of India.... I also don’t know many members of Congress who are pushing for the precise commitment that the administration has made.<sup>12</sup>

Congressman Leach instead suggested that U.S. support for a permanent seat for India on the United Nations Security Council might have been a more appropriate gesture.

Other observers outside of Congress have questioned whether U.S. energy assistance should focus on expanding nuclear power, in contrast to other energy alternatives. Henry Sokolski, of the Nonproliferation Policy Education Center, has argued that Indian energy needs might be better met through free market allocation, including improved efficiency. He asserts that nuclear power is the least leveraged of India’s options to meet India’s energy needs, given that it currently provides only 2.7% of installed electrical capacity.<sup>13</sup> India’s projections of its nuclear energy needs are predicated on an estimated annual growth rate of 8%, which some observers believe may be unrealistic.<sup>14</sup> One well-known Indian commentator, Brahma Chellaney, argued in the *International Herald Tribune* that the premise that India

<sup>10</sup> The House International Relations Committee held the following hearings: “The U.S. and India: An Emerging Entente?” (September 8, 2005); “The U.S.-India Global Partnership: The Impact on Nonproliferation”(October 26, 2005); and “U.S.-India Global Partnership: How Significant for American Interests?” (November 16, 2005). See [[http://wwwc.house.gov/international\\_relations](http://wwwc.house.gov/international_relations)] for testimonies of witnesses. The Senate Foreign Relations Committee held a hearing on November 2, 2005, entitled, “Implications of U.S.-India Nuclear Energy Cooperation.”

<sup>11</sup> Statement of Under Secretary of State for Political Affairs, R. Nicholas Burns, September 8, 2005, House Committee on International Relations, Hearing on “The U.S. and India: An Emerging Entente?” (hereafter cited as “Sept. 8, 2005 HIRC US-India hearing”) p. 1.

<sup>12</sup> Remarks by Congressman Jim Leach, Sept. 8, 2005, HIRC US-India Hearing.

<sup>13</sup> Henry Sokolski, “Implementing the Indian Nuclear Deal: What’s at Risk, What Congress Should Require,” Briefing to Congress, Sept. 2005.

<sup>14</sup> See “India’s Growth Target Unrealistic,” *Financial Times*, Jan. 23, 2003, which quotes the Asia Development Bank.

should meet its rapidly expanding energy needs through importing nuclear power reactors was flawed. Chellaney argued that a better approach for India would be to secure clean-coal and renewable energy technologies.<sup>15</sup>

The Senate Foreign Relations Committee's November 2, 2005 hearing sought, among other things, to answer the question of why civil nuclear cooperation was so important to the U.S.-Indian strategic relationship. Under Secretary of State Nicholas Burns told Committee members that "India had made this the central issue in the new partnership developing between our countries."<sup>16</sup>

## **Impact on U.S. Nonproliferation Policies**

The Administration has characterized civil nuclear cooperation with India as a "win" for nonproliferation because it would bring India into the nonproliferation "mainstream." In short, the Administration is proposing that India should be courted as an *ally* in U.S. (not global) nonproliferation policy, rather than continue as a *target* of U.S. (and global) nonproliferation policy. India should become an ally for three reasons: past policies have not worked; India has a relatively good nonproliferation record anyway, and India could be a useful ally in the nonproliferation regime.

Some observers, however, are concerned that India may not support U.S. nonproliferation policies sufficiently to warrant nuclear cooperation, particularly where the United States faces its greatest nuclear proliferation threat: Iran. For example, at the September 8 HIRC hearing, several members of Congress questioned whether the United States had obtained assurances from India of its support on Iran before it issued the July 18 joint statement.

**Iran.** Two factors may present challenges to Indian support for U.S. policies toward Iran. First, India has a growing strategic relationship with Iran, not limited to its interest in a proposed \$7.4 billion, 2800-km-long gas pipeline between Iran, Pakistan, and India. Second, India has a strong tradition of foreign policy independence, as a long-time leader of the Non-Aligned Movement (NAM) states and as a vigorous opponent of the discriminatory nature of the Nuclear Nonproliferation Treaty.<sup>17</sup> One witness before the House International Relations Committee hearing on November 16, 2005, suggested that opposition from the United States on the gas pipeline project is considered to be "interference with India's autonomy in foreign relations, as well as disregard for its security and energy needs."<sup>18</sup>

<sup>15</sup> Brahma Chellaney, "US Deal is a Bad Choice for Power Generation," *International Herald Tribune*, December 27, 2005.

<sup>16</sup> Statement of Under Secretary of State for Political Affairs, R. Nicholas Burns, November 2, 2005, Senate Foreign Relations Committee Hearing on "Implications of U.S.-India Nuclear Energy Cooperation.

<sup>17</sup> See Miriam Rajkumar, "Indian Independence," Carnegie Analysis, Sept. 20, 2005, at [<http://www.carnegieendowment.org/npp/publications/index.cfm?fa=view&id=17486>].

<sup>18</sup> Dr. Francine Frankel, Statement before the House International Relations Committee, (continued...)

On Iran's nuclear program, Indian officials have stated they do not support a nuclear weapons option for Iran. However, they do not agree with the United States on the need to refer Iran's nuclear program to the U.N. Security Council, which the United States has proposed for two years, nor on the need to limit Iran's nuclear fuel cycle development. When the IAEA Board of Governors passed a resolution (GOV/2005/77) on September 24, 2005, finding Iran in noncompliance with its safeguards agreement, India voted with the United States, provoking significant domestic dissent. However, the resolution was weak by traditional standards of noncompliance resolutions: it did not pass by consensus (Venezuela voted against it and 12 countries abstained) and it did not refer the matter immediately to the Security Council. According to Indian Foreign Secretary Shyam Saran, India voted for the resolution and against the majority of NAM states which abstained, because it felt obligated after having pressured the EU-3 to omit reference to immediate referral to the U.N. Security Council.<sup>19</sup> Moreover, India explained its vote this way:

In our Explanation of Vote, we have clearly expressed our opposition to Iran being declared as noncompliant with its safeguards agreements. Nor do we agree that the current situation could constitute a threat to international peace and security. Nevertheless, the resolution does not refer the matter to the Security Council and has agreed that outstanding issues be dealt with under the aegis of the IAEA itself. This is in line with our position and therefore, we have extended our support.<sup>20</sup>

India's support for U.S. policy toward Iran could be tested significantly by the next push for the Board to refer Iran to the Security Council, although much depends on Iranian behavior.

Iran may also test India's support for curtailing peaceful nuclear programs. India has always been an advocate of states' rights to develop the peaceful uses of nuclear energy and for thirty years has derided the NPT and nonproliferation policies as discriminatory. The official Iranian press agency reported Prime Minister Singh as telling President Ahmadinejad on September 22 that solutions to Iran's nuclear problem should be based on the principle that Iran as an NPT member should retain its lawful rights.<sup>21</sup> On September 26, Foreign Secretary Saran told the press that "With respect to Iran's right to peaceful uses of nuclear energy, that is something which we have ourselves no reservations about."<sup>22</sup>

<sup>18</sup> (...continued)

November 16, 2005, "India's Potential Importance for Vital U.S. Geopolitical Objectives in Asia: A Hedge Against a Rising China?"

<sup>19</sup> "Press Briefing by Foreign Secretary on the events in UN and IAEA," New Delhi, Sept. 26, 2005, available at [[http://www.indianembassy.org/press\\_release/2005/Sept/29.htm](http://www.indianembassy.org/press_release/2005/Sept/29.htm)].

<sup>20</sup> Briefing by MEA Official Spokesperson on Draft Resolution on Iran in IAEA, New Delhi, Sept. 24, 2005, available at [[http://www.indianembassy.org/press\\_release/2005/Sept/16.htm](http://www.indianembassy.org/press_release/2005/Sept/16.htm)].

<sup>21</sup> "Ahmadinejad Thanks India for Positive Stands on Iran in IAEA," IRNA, Sept. 23, 2005.

<sup>22</sup> Sept. 26, 2005 press briefing, op. cit.

**Restricting Enrichment and Reprocessing.** One of India's commitments in the July 18 statement was to refrain from transferring enrichment and reprocessing technologies to states that do not have already have those technologies and to support international efforts to limit their spread. This could help move India politically into the mainstream of nonproliferation efforts, since India historically has stood with non-aligned nations in championing the inalienable right to develop peaceful uses of nuclear energy. To some observers, U.S. efforts to restrict development of certain aspects of the nuclear fuel cycle (enrichment and reprocessing) that are most useful in a nuclear weapons development program are seen as creating a new category of "have-nots" — those states that can have some peaceful nuclear technology but cannot be trusted with it all. In other words, states like Japan, Germany, and Brazil might be trusted with sensitive technologies, but states like Iran and North Korea cannot be trusted. India has supported EU-3 negotiations with Iran, which have as their ultimate objective getting Iran to walk away from enrichment and reprocessing, but India has also, at least rhetorically, supported states' inalienable rights to the peaceful nuclear fuel cycle. Nonetheless, there is little evidence thus far that India had exported such technology abroad in the past. U.S. officials reportedly have said the United States will not engage in reprocessing or enrichment technology cooperation with India.

**Other Priorities.** In his February 11, 2004, speech, President Bush outlined several counterproliferation priorities, including expanding the Proliferation Security Initiative; strengthening laws and international controls against weapons of mass destruction (WMD) and missile proliferation (ultimately resulting in adoption of UNSCR 1540); expanding the G8 Global Partnership; and strengthening IAEA safeguards through universal adoption of the Additional Protocol. Ambassador Joseph has noted that India's adherence to NSG and MTCR guidelines would help ensure that WMD and missile-related technologies would not be transferred. Although India's adoption of the Additional Protocol would contribute to its universalization, there are few proliferation benefits to be realized from the adoption of such a protocol in a nuclear weapons state. Finally, although the United States reportedly has asked India to endorse PSI, that endorsement has not been forthcoming.

## Impact on the Nonproliferation Regime

India has long stood outside the nonproliferation regime and this initiative raises questions about whether a partial solution can be beneficial or detrimental. Some considerations include cohesion within the Nuclear Suppliers' Group, effect on non-nuclear weapon member states of the NPT, and perspectives on whether the initiative missed opportunities to strengthen the nuclear nonproliferation regime.

**NSG Cohesion.** A first order concern is cohesion within the Nuclear Suppliers Group (NSG). As noted earlier, the NSG has followed the U.S. lead on requiring full-scope safeguards as a condition of nuclear supply. During the September 8 hearing, House International Relations Committee Chairman Henry Hyde noted that "Many of us are strong supporters of the NSG and would not want to see it weakened or destroyed." Chairman Hyde asked whether the administration could assure the Committee that

...no matter what else happens, that the administration will continue to abide by NSG guidelines, and if you are unable to gain consensus within the NSG for the amendments you need, you will not implement the new India policy in violation of NSG guidelines.

Ambassador Joseph assured the Committee that “we intend to take no action that would undercut the effectiveness of the NSG,” and further, that the Administration did not intend to change the consensus procedure or even change the NSG full-scope safeguards condition of nuclear supply.<sup>23</sup>

Dissent within the NSG could be counterproductive to achieving other objectives the United States is pursuing in nuclear nonproliferation, such as restricting the fuel cycle, disarming North Korea, and restraining Iran, all of which rely on the considerable support of friends and allies. Moreover, harmonizing export controls has played a key role in Bush counter- and non-proliferation policies in the last few years and is particularly important for interdiction efforts. U.S.-India cooperation could prompt other suppliers, like China, to justify supplying other non-nuclear-weapon states, like Pakistan. China, which joined the NSG in 2004, reportedly has not yet shared its views on the nuclear cooperation agreement. Russia, which only halted fuel supplies to the Indian Tarapur reactors in December 2004 at the insistence of the NSG, could welcome the opportunity to resume fuel supplies to Tarapur, but might also be emboldened to push ahead with supplying more reactors to Iran, regardless of U.S. views.

**Effect on NPT Member States.** India has complained for years that it has been excluded from regular nuclear commerce because of its status outside the NPT. Some observers believe this is a good thing and shows that the policy works. Others believe that a new paradigm is needed for India because it will not join the NPT as a non-nuclear weapon state.

The NPT is basically a two-way bargain. Non-nuclear-weapon states under the NPT give up the option of developing nuclear weapons in exchange for the promise of peaceful nuclear cooperation. Nuclear weapon states under the NPT were not required immediately to disarm, but to commit to eventual disarmament. India, as a state outside the NPT, is bound by neither of these commitments. Some observers may see the offer of nuclear cooperation previously reserved for states under the NPT with full-scope safeguards not only as undermining the agreements made by non-nuclear weapon states, but also the commitments made by nuclear weapon states to eventually disarm. In this view, India’s continued unilateral testing moratorium is insufficient, compared with signing the Comprehensive Test Ban Treaty and its support for FMCT negotiations is insufficient compared with capping its nuclear weapons fissile material production now, as four of the five nuclear weapon states have formally done.

The proliferation shocks of the 1990s, when the Iraqi and North Korean clandestine nuclear weapons programs surfaced, led to the strengthening of the NPT and export control regimes. At the 1995 NPT Review and Extension Conference,

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<sup>23</sup> Sept. 8, 2005 HIRC US-India hearing.

NPT parties affirmed the NSG's decision to require full-scope safeguards for nuclear exports, supporting the principle that non-NPT parties should not be eligible for the same kinds of assistance as NPT parties in good standing. At the 2000 conference, NPT parties again supported that principle. According to one U.S. participant in that conference, "Reinforcement of this guideline is important given some who have questioned whether this principle should be relaxed for India and Pakistan, which have not accepted full-scope IAEA safeguards. The answer from NPT parties is clearly no."<sup>24</sup>

In the last 10 years, virtually all states agreed to strengthen the nonproliferation regime, sacrificing some sovereignty by opening up to additional, intrusive inspections under the Additional Protocol. In the wake of revelations in 2004 about Pakistani scientist A.Q. Khan's nuclear black market sales, non-nuclear weapon states under the NPT are also being asked to consider further restrictions on their sovereignty by voluntarily restricting their access to sensitive nuclear technologies like uranium enrichment and reprocessing. If some states view the U.S.-Indian nuclear cooperation agreement as a breach of faith in the basic bargain of the NPT, they might be less inclined to accept additional sacrifices, to the detriment of the nonproliferation regime.

**Missed Opportunities.** Ambassador Joseph described the nuclear initiative as representing "a substantial net gain for nonproliferation. It is a win for our strategic relationship, a win for energy security, and a win for nonproliferation." Ambassador Joseph said he was "convinced that the nonproliferation regime will emerge stronger as a result."<sup>25</sup>

However, some observers have suggested the United States asked for too little. For example, Fred McGoldrick, Harold Bengelsdorf and Lawrence Scheinman, argued in the October 2005 issue of *Arms Control Today* that

It is open to serious doubt whether the proposed Indian concessions were significant enough to justify the accommodations promised by the United States and whether the steps the United States and India agreed to take in the civil nuclear area will, on balance, be supportive of global nonproliferation efforts...If the Bush Administration is able to implement the joint declaration without significant modification, it will have given the Indians a great deal — acknowledgment as a de facto nuclear weapon state and access to the international nuclear energy market—in return for largely symbolic concessions in the nonproliferation area.<sup>26</sup>

Robert Einhorn, of the Center for Strategic and International Studies, told members of the House International Relations Committee on October 26, 2005, that

<sup>24</sup> Ambassador Norman Wulf, "Observations from the 2000 NPT Review Conference," *Arms Control Today*, Nov. 2000.

<sup>25</sup> Ibid.

<sup>26</sup> Fred McGoldrick, Harold Bengelsdorf, Lawrence Scheinman, "The U.S.-India Nuclear Deal: Taking Stock," *Arms Control Today*, Oct. 2005, pp. 6-12. See [[http://www.armscontrol.org/act/2005\\_10/OCT-Cover.asp](http://www.armscontrol.org/act/2005_10/OCT-Cover.asp)].

several of the steps pledged by India are “simply reaffirmations of existing positions.”<sup>27</sup> The Indian embassy itself, not surprisingly, has downplayed the depth and breadth of its nonproliferation commitments, describing all but its safeguards commitments under the July 18 statement in the following way:

A number of *existing policies* were also reiterated by India, among them a unilateral moratorium on nuclear testing, working towards conclusion of a multilateral Fissile Material Cut-off Treaty, non-transfer of enrichment and reprocessing technologies, securing nuclear materials and technology through export control, and harmonisation with MTCR and NSG guidelines.[emphasis added]<sup>28</sup>

India has had a self-imposed nuclear test moratorium for years, although supporters of this agreement note that this agreement would bind India bilaterally to honoring that pledge. If the NSG used a similar criteria in approving exports, it could further strengthen that pledge. India has supported FMCT negotiations for years, despite continuing to produce fissile material for use in nuclear weapons. Since the pace of FMCT negotiations is glacial, support for negotiations could allow India to continue producing fissile material indefinitely. At least one supporter of the agreement has argued that India should not cap its nuclear weapons program, and that outcomes restraining the ability to build up its nuclear stockpile “threaten to place New Delhi at a disadvantage vis-a-vis Beijing, a situation that could not only undermine Indian security but also U.S. interests in Asia.”<sup>29</sup>

The most far-reaching of the commitments is to separate civilian and military facilities, declare civilian facilities, and place them under safeguards. Administration officials have pointed to this aspect of the agreement as a nonproliferation “plus.” Yet, India’s voluntary safeguards commitments essentially place India squarely in the company of nuclear weapon states. Allowing India broad latitude in determining which of its facilities to put under international safeguards is a privilege accorded currently only to nuclear weapon states under the NPT. Although the United States “in no way recognizes India as an NPT nuclear weapons state,” excluding military facilities from inspections is a tacit recognition of their legitimacy. Indian statements to the press indicate that they see their safeguards commitment very much as the kind that nuclear weapon states undertake. The Indian embassy backgrounder on the agreement stated that “Nuclear weapon states, including the US, have the right to shift facilities from civilian category to military and there is no reason why this

<sup>27</sup> Statement by Robert J. Einhorn, Center for Strategic and International Studies, “The U.S.-India Global Partnership: The Impact on Nonproliferation” Oct. 26, 2005.

<sup>28</sup> “Backgrounder on India-U.S. Civilian Nuclear Energy Cooperation,” Indian Embassy, July 29, 2005. See [[http://www.indianembassy.org/press\\_release/2005/July/32.htm](http://www.indianembassy.org/press_release/2005/July/32.htm)].

<sup>29</sup> Ashley J. Tellis, *India As A New Global Power: An Action Agenda for the United States*, Carnegie Endowment for International Peace, 2005, p. 25.

should not apply to India.”<sup>30</sup> Such an approach would not meet U.S. legal standards for agreements for cooperation.<sup>31</sup>

Ambassador Burns told reporters on July 19, 2005, that “this agreement can be verified and will be verified,” and presumably that refers to verifying the U.S. obligation under Article I of the NPT “not in any way to assist, encourage, or induce any non-nuclear weapon state to manufacture or otherwise acquire nuclear weapons.” From a broader nonproliferation perspective, however, there is little value in inspecting facilities in a nuclear weapons state. In particular, an Additional Protocol on top of largely symbolic safeguards adds few nonproliferation benefits. Nonetheless, Ambassador Joseph has noted that signing an Additional Protocol will require India to report its trigger list exports to the IAEA.

IAEA Director General Dr. ElBaradei said that he has “always advocated concrete and practical steps towards the universal application of IAEA safeguards.”<sup>32</sup> In remarks to the Carnegie Endowment’s Nonproliferation Conference, Dr. ElBaradei cited additional safety benefits of putting more Indian facilities under safeguards. However, it should be noted that the NSG already has an exception to its full-scope safeguards requirement for safety-related items.

The Administration has asserted that India has an “exceptional” record of nonproliferation and despite a few isolated sanctions, most of the evidence supports the view that India has exercised restraint in export controls.<sup>33</sup> As such, however, India’s promise to refrain from transferring enrichment and reprocessing technologies to states that do not have them, as well as its promise to adhere to NSG guidelines, may be little more than a formality.

Many observers have noted that there are no measures in this global partnership to restrain India’s nuclear weapons program. Some have suggested that the United States should have asked India to halt fissile material production for weapons. Ambassador Bob Joseph stated that the United States remains “committed to achieving Indian curtailment of fissile material production, and we have strongly

<sup>30</sup> Ibid.

<sup>31</sup> See McGoldrick, Bengelsdorf, and Scheinman, op cit., for a description of the requirement for safeguards in perpetuity.

<sup>32</sup> “IAEA Director General Reacts to U.S.-India Cooperation Agreement,” See [<http://www.iaea.org/NewsCenter/PressReleases/2005/prn200504.html>]. Critics of the IAEA point out that it is an organization that measures its success in part by how much nuclear material and how many facilities are under inspection.

<sup>33</sup> On Sept. 29, 2004, the State Department published Public Notice 4845 in the Federal Register imposing sanctions pursuant to the Iran Nonproliferation Act of 2000. Two Indian scientists were named — Dr. Prasad and C. Surendar. The State Department has not revealed what technology or equipment was transferred, but both scientists have worked for the Nuclear Power Corporation of India, Ltd., a government-owned entity that runs India’s nuclear power plants. The Indian embassy reported in December 2005 that sanctions on Dr. Surendar had been removed. See [[http://www.indianembassy.org/press\\_release/5.asp](http://www.indianembassy.org/press_release/5.asp)]. In the December 30, 2005 Federal Register, Public Notice 5257 stated simply that sanctions on an Indian entity issued in Public Notice 4845 had been rescinded.

encouraged a move in this direction. We stand willing to explore options that might serve this objective, but we will not insist on it for purposes of this civil nuclear initiative.”<sup>34</sup> Indian officials, on the other hand, have taken pains to point out that “There is no commitment at all to cease production of fissile material ahead of the conclusion of such a multilateral [FMCT] treaty.”<sup>35</sup> Other observers have noted that although India committed to a test ban, it did not commit to signing the Comprehensive Test Ban Treaty. Still other observers have suggested that if India insists on being treated as a nuclear weapon state, it should undertake responsibilities similar to those of the other nuclear weapon states, for example, placing fissile material excess to defense needs under safeguards. Many believe that real limits on India’s nuclear weapons program would constitute a “win” for nonproliferation.

## The Way Ahead: Challenges and Uncertainties

In his September 8 HIRC testimony, Ambassador Joseph highlighted three challenges and uncertainties: separation of India’s civil and military facilities, NSG support, and the issue of “other states” (such as Pakistan or Israel, which might ask for similar treatment).<sup>36</sup> By November, Ambassador Joseph had a list of five challenges when he testified before the Senate Foreign Relations Committee: meaningful separation, negotiating the appropriate safeguards arrangement, NSG support, avoiding the temptation to renegotiate the deal, and securing domestic legal reform.<sup>37</sup>

A particular challenge for the United States is to ensure that the new steps — separating civilian and military facilities, placing civilian facilities under IAEA safeguards, and applying an additional protocol — are implemented in a way that satisfies U.S. legal requirements. The United States under Article I of the NPT must ensure that its assistance does not “in any way assist, encourage or induce any non-nuclear-weapon state to manufacture nuclear weapons.” A significant question is how India, in the absence of full-scope safeguards, can provide sufficient confidence that U.S. peaceful nuclear technology will not be diverted to nuclear weapons purposes, as it was in 1974.<sup>38</sup> Some observers believe that IAEA safeguards provide

<sup>34</sup> Sept 8, 2005 HIRC US-India hearing.

<sup>35</sup> “Backgrounder on India-U.S. Nuclear Energy Cooperation,” July 29, 2005.

<sup>36</sup> Statement of Robert G. Joseph, Under Secretary of State for Arms Control and International Security, Sept. 8, 2005, HIRC US-India Hearing. Ambassador Joseph described India as an exceptional case and civil nuclear cooperation as a mechanism to further deepen its commitment to international nonproliferation. Joseph then suggests that neither Pakistan nor Israel — two other nuclear weapon states outside the NPT — has a civil nuclear energy program that approximates India’s and that the United States will not seek such cooperation with those states.

<sup>37</sup> Statement of Robert G. Joseph, Under Secretary of State for Arms Control and International Security, November 2, 2005 SFRC India hearing.

<sup>38</sup> Although India maintained a certain ambiguity by calling its 1974 test a “peaceful nuclear explosion,” the 1998 tests leave little doubt that the experience gained was put to use in a  
(continued...)

little assurance of the non-diversion of fissile material, particularly in a state that has an active nuclear weapons program. Others believe that the application of an Additional Protocol helps strengthen the IAEA's capabilities to detect diversion. India has agreed to sign an additional protocol for its civilian facilities. However, given India's unsafeguarded nuclear facilities, this step is also unlikely to make a difference in providing additional assurances of the non-diversion of nuclear material.

The United States has a legal obligation under Section 123 a. (1) of the Atomic Energy Act to maintain safeguards with respect to all U.S. materials and equipment transferred pursuant to the agreement *as long as that material or equipment remains under the jurisdiction of the cooperating party, irrespective of whether the agreement is terminated or suspended* [emphasis added]. The language of the joint statement, however, refers to India "voluntarily placing its civilian facilities under IAEA safeguards." There are currently three kinds of safeguards agreements in force: INFCIRC/66, INFCIRC/153, and voluntary safeguards agreements made by the five nuclear weapon states.<sup>39</sup> Only INFCIRC/66 agreements, which predate the NPT and which India currently has on four of its nuclear reactors, have indefinite application. INFCIRC/153 agreements apply to nuclear material, which means that if a facility is emptied of nuclear material, it would not have to be inspected, and voluntary safeguards agreements make facilities "eligible" for safeguards, but do not require the IAEA to inspect them. Although Foreign Minister Saran has stated that "it is legitimate for our partners to expect that such cooperation will not provide any advantage to our strategic programme," it is not clear which kind of agreement India will seek and which one will be acceptable to the IAEA. In November 2, 2005 testimony before the Senate Foreign Relations Committee, Ambassador Joseph stated that the United States "would not view a voluntary offer arrangement as defensible from a nonproliferation standpoint or consistent with the Joint Statement, and therefore do not believe it would constitute an acceptable safeguards arrangement." Ambassador Joseph also noted that safeguards must be applied in perpetuity.<sup>40</sup>

Administration officials repeatedly stressed that India's separation plan must be credible, transparent, and defensible from a nonproliferation standpoint.<sup>41</sup> Although Ambassador Joseph has noted that "the resultant safeguards must contribute to our

<sup>38</sup> (...continued)

nuclear weapons program. Plutonium produced in the CIRUS reactor, which the United States supplied with heavy water, was used in the 1974 test. See Victor Gilinsky and Paul Leventhal, "India Cheated," *Washington Post*, June 15, 1998.

<sup>39</sup> INFCIRC, an abbreviation of "Information Circular," is a designation the IAEA uses to record its agreements with states and organizations. INFCIRC/66 and /153 are model agreements; the actual agreements with states will bear different numbers. INFCIRC/66 agreements predate the NPT and were used in bilateral safeguards arrangements, whereas INFCIRC/153 agreements are "full-scope safeguards" under the NPT.

<sup>40</sup> Statement of Robert G. Joseph, Under Secretary of State for Arms Control and International Security, November 2, 2005 SFRC India hearing.

<sup>41</sup> Statement of Under Secretary of State Robert Joseph before the Senate Foreign Relations Committee, November 2, 2005.

nonproliferation goals,” it is not clear what that might mean.<sup>42</sup> Some observers have noted that a separation plan needs to take into account several factors: India’s past commitments (e.g., use of purportedly “peaceful” nuclear reactors like CIRUS to produce plutonium for nuclear weapons); the impact on its nuclear weapons program (some advocate a plan that would cap India’s fissile material production); and U.S. legal requirements for safeguards in perpetuity. A Canadian embassy official stated in mid-December 2005 that Canada encouraged India to place CIRUS under international safeguards. Any assessment of a credible and defensible separation plan needs to consider potential U.S. obligations, which are yet to be revealed in any agreement for peaceful nuclear cooperation. One advantage of complying with the provisions in the Atomic Energy Act is that it requires a detailed nuclear cooperation agreement as well as detailed assessments of nuclear proliferation impacts.

Senator Lugar, in a December 6, 2005 press release, noted that the civil-military separation plan was the next hurdle in moving forward with the agreement, and that the U.S. Congress would likely judge the separation plan according to three criteria: 1. Compliance with safeguards requirements; 2. Non-assistance (with respect to India’s nuclear weapons program); and 3. Transparency.<sup>43</sup> The first two criteria reflect what is required by U.S. law and under the NPT. With respect to transparency, it is not clear whether transparency would require India to simply name civilian facilities or to provide evidence of separation.

In late December 2005, Foreign Minister Saran visited the United States and, according to press reports, discussed a separation plan with U.S. officials. Confidentially, administration officials noted that the plan was not credible or defensible from a nonproliferation standpoint, and negotiations will continue.

With respect to safeguards negotiations, India reportedly has not yet been in contact with IAEA officials to discuss safeguards issues. Ultimately, the United States will have little influence over the outcome of the safeguards negotiation process, since safeguards agreements are negotiated between the state and the IAEA.<sup>44</sup> India’s broad latitude in separating its civilian facilities from military facilities and voluntarily placing them under safeguards will affect how observers perceive the “verifiability” of the agreement. Ambassador Joseph noted in November that “the number of facilities and activities that India places under IAEA safeguards, and the method and speed with which it does so, will directly affect the degree to which we will be able to build support for full civil nuclear cooperation.” Congress could, however, condition its approval of an agreement for cooperation on adequate implementation of safeguards on India’s civil nuclear program, as described below.

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<sup>42</sup> Ibid.

<sup>43</sup> See press release at [<http://lugar.senate.gov/pressapp/record.cfm?id=249537>]

<sup>44</sup> Under Secretary of State for Political Affairs Nicholas Burns, “Briefing on the Signing of the Global Partnership Agreement Between the United States and India,” July 19, 2005. See [<http://www.state.gov/p/us/rm/2005/49831.htm>].

## Negotiating with India

The July 18, 2005 joint statement by President Bush and Prime Minister Singh noted that the two countries would establish working groups (headed on the Indian side by Foreign Secretary Saran and on the U.S. side by Under Secretary Burns) to hammer out details of cooperation. A visit by President Bush to India in 2006 will provide impetus for progress. It is not clear whether Congress is expected to approve legislation or an agreement before the details of safeguards on Indian nuclear facilities are clear. In the case of other states, safeguards negotiations have taken years.

## NSG Consultations

U.S. officials have consulted both informally and formally with NSG members thus far.<sup>45</sup> Initial responses from the United Kingdom, Russia and France have all been positive. In mid-September, France issued a joint statement with India that it would work with NSG partners to enable nuclear cooperation with India to go forward.<sup>46</sup> Other responses have been mixed, especially from Sweden and Canada. Some “NPT purists,” including Ireland, Japan, and the Netherlands, reportedly have raised questions. Canada, which provided the CIRUS reactor to India, as well as blueprints for CANDU reactors (that India subsequently used to build indigenous reactors that could make plutonium for its weapons program), reportedly told U.S. officials that it welcomed U.S. steps to addressing what has been a thorny issue in the NPT — nuclear weapon states outside the regime — but had hoped the United States would have placed more conditions on the agreement. In particular, the deal would have been more positive if the United States had obtained an Indian commitment to freeze production of fissile material for nuclear weapons.<sup>47</sup> As noted above, Canada hopes India will consider placing CIRUS under safeguards.

In October, the NSG held a Consultative Group meeting, in which member states discussed the issue of nuclear cooperation with India. U.S. officials (Assistant Secretaries of State Rademaker and Rocca) did not present a strategy for creating an exception, but presented the issue. NSG members are likely to want to see exactly what Indian safeguards commitments are before proceeding further. Reportedly, some NSG members may want to see restrictions on cooperation, such as no enrichment or reprocessing cooperation, no heavy water cooperation, and no exports of highly enriched uranium or plutonium. Brazil will chair the next NSG plenary meeting in mid-2006.

Although U.S. officials did not present a plan to the NSG, Ambassador Joseph has told Congress that he envisions adopting an exception or set of criteria that would allow full cooperation with India without abandoning NSG consensus rules or the

<sup>45</sup> “NSG Begins Mulling Response To U.S.-India Cooperation Deal,” *Nuclear Fuel*, Sept. 26, 2005.

<sup>46</sup> Sept. 12, 2005, Joint Statement by President Chirac and Prime Minister Singh, Paris.

<sup>47</sup> “NSG Begins Mulling Response To U.S.-India Cooperation Deal,” *Nuclear Fuel*, Sept. 26, 2005.

full-scope safeguards condition of supply.<sup>48</sup> One approach could be to adopt the commitments India made on July 18 as the criteria for an exception. In short, exports to a non-nuclear weapon state without full scope safeguards could be allowed if that state: separated military and civilian facilities, declared and placed civilian facilities under IAEA safeguards, adopted an additional protocol, supported FMCT and a nuclear testing moratorium, refrained from transferring enrichment and reprocessing technologies, implemented export controls, and adhered to the MTCR and NSG guidelines. NSG members would have to agree that those commitments represent significant enough nonproliferation gains to warrant full nuclear cooperation.

An alternative to additional criteria would be simply to have all 45 member states decide in the plenary to allow nuclear exports to India, based on its past export control history and its future commitments. While this has the benefit of not seeking changes to NSG policies or procedures, it still must be compelling enough to win the support of all other member states. Some NSG members, for example, Sweden, Denmark, Austria, and Ireland, are expected to be critical of the U.S. policy on the basis of nonproliferation principles.<sup>49</sup>

## **Consulting with Congress**

Significant U.S.-Indian nuclear cooperation requires consent by Congress because India does not meet existing nonproliferation criteria under current U.S. law (Atomic Energy Act; P.L. 95-242; 42 U.S.C. § 2153 et seq.). As noted in the July 18<sup>th</sup> Joint Statement, President Bush “would also seek agreement from Congress to adjust U.S. laws and policies.” Regardless of how that is achieved, any agreement for nuclear cooperation with India requires positive approval from Congress, either through existing provisions of law, or through passing new legislation that would create an exception for India. Three options — complying with existing law, amending existing law, or proposing stand-alone legislation — are described below.

**Complying with Existing Law.** All significant nuclear cooperation requires an agreement for cooperation. The Nuclear Non-Proliferation Act of 1978 (NNPA) amended the Atomic Energy Act of 1954 (AEA),<sup>50</sup> to include a requirement for full-scope safeguards for significant nuclear exports non-nuclear weapon states.<sup>51</sup>

**Agreements for Cooperation.** Section 123 of the AEA (42 U.S.C. 2153) requires an agreement for cooperation as a prerequisite for significant nuclear cooperation with any nation; the United States has about 27 agreements for cooperation in place now, and had an agreement with India from 1963 to 1993.

<sup>48</sup> Sept. 8, 2005 HIRC US-India hearing, Nov. 2, 2005 SFRC US-India hearing.

<sup>49</sup> Mark Hibbs, “U.S. to face some opposition if it seeks consensus NSG rule on India,” *Nucleonics Week*, Sept. 29, 2005.

<sup>50</sup> P.L. 83-703, 42 U.S.C. §§ 2153 et seq.

<sup>51</sup> Nuclear cooperation includes the distribution of special nuclear material, source material, and byproduct material, to licensing for commercial, medical, and industrial purposes. These terms, “special nuclear material,” “source material,” and “byproduct material,” as well as other terms used in the statute, are defined in 42 U.S.C. § 2014.

There are nine criteria that an agreement must meet unless the President exempts the agreement.<sup>52</sup> Briefly, they are guarantees that 1) safeguards continue in perpetuity; 2) full-scope safeguards are applied in non-nuclear weapon states; 3) there is no transfer; 4) U.S. has right of return; 5) there is no transfer of material or classified data; 6) physical security is maintained; 7) no enrichment or reprocessing without prior approval; 8) storage is approved by United States for plutonium and HEU; and 9) anything produced through cooperation is subject to all the above requirements.

The most difficult of these requirements to meet in the case of India is the full-scope safeguards requirement for non-nuclear weapon states (AEA, Sec. 123(a)(2)).<sup>53</sup> The President may exempt an agreement for cooperation from any of the requirements if he determines that the requirement would be “seriously prejudicial to the achievement of U.S. non-proliferation objectives or otherwise jeopardize the common defense and security.” An exempted agreement would not become effective “unless the Congress adopts, and there is enacted, a joint resolution stating that the Congress does favor such agreement.”<sup>54</sup> In other words, both chambers of Congress must approve the agreement if it does not contain all of the Section 123 requirements.

**Export Licensing.** In addition to formalizing cooperation in a peaceful nuclear cooperation agreement, the AEA sets out procedures for licensing exports (Sections 126, 127, and 128; 42 U.S.C. 2155, 2156, 2157). The Nuclear Regulatory Commission (NRC) is required to meet criteria in Sections 127 and 128 in considering authorizing export licenses. These criteria mirror those in Section 123 and include full-scope safeguards for non-nuclear weapon states. In addition, the President must judge that the proposed export or exemption will “not be inimical to the common defense and security” or that *any* export of that type would not be inimical to the common defense and security because it lacks significance for nuclear explosive purposes. Additional considerations, if warranted, include whether the license or exemption will materially advance the nonproliferation policy of the United States by encouraging the recipient nation to adhere to the NPT; whether failure to issue the license or grant the exemption would otherwise be seriously prejudicial to U.S. nonproliferation objectives; and whether the recipient nation has agreed to conditions identical to those laid out in Section 127.

If the NRC does not issue an export license, the President may still authorize an export if he “determines that failure to approve an export would be seriously prejudicial to the achievement of U.S. nonproliferation objectives or otherwise jeopardize the common defense and security.” In that case, the President would submit the license or authorization, along with a detailed assessment and other

<sup>52</sup> These are listed in Section 123.a., (1) through (9), 42 U.S.C. § 2151.

<sup>53</sup> 42 U.S.C. 2153(a)(2). Section 4 (b) of the NNPA specifies that all other terms used in the NNPA not defined in Section 4 “shall have the meanings ascribed to them by the 1954 Act, the Energy Reorganization Act of 1974 and the Treaty [NPT].” S.Rept. 95-467 further clarified that under the NPT, the five nuclear weapon states are the U.S., U.K., China, the Soviet Union, and France. *U.S. Code Congressional and Administration News*, 95<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1978, vol. 3, p. 329.

<sup>54</sup> This new requirement was added by the Export Administration Amendment Act of 1985, P.L. 99-64, Section 301 (b) (2), 99 Stat. 120.

documentation, to Congress for 60 days of continuous session. If Congress disapproves the export, no further exports can be made during that Congress. If Congress does not disapprove the export, it would review one license for export each year.

In the case of exports pursuant to an exempted agreement for cooperation — which would be the case for Indian nuclear cooperation, the NRC would not have to meet the full-scope safeguards requirement in assessing whether it could issue export licenses. In addition, Congress would only review one such license per year.

**Termination of Cooperation.** Another significant hurdle is Section 129 of the AEA (42 U.S.C. 2158), which requires ending exports of nuclear materials and equipment or sensitive nuclear technology to any non-nuclear-weapon state that, after March 10, 1978, detonates a nuclear explosive device; terminates, abrogates or materially violates IAEA safeguards; or engages in activities involving source or special nuclear material and having “direct significance” for the manufacture or acquisition of nuclear explosive devices, and “has failed to take steps which, in the President’s judgment, represent sufficient progress toward terminating such activities.” India is clearly in this category. The President can waive termination if he determines that “cessation of such exports would be seriously prejudicial to the achievement of United States nonproliferation objectives or otherwise jeopardize the common defense and security.” The President must submit his determination to Congress, which is then referred to the House International Relations Committee and the Senate Foreign Relations Committee for 60 days of continuous session. The determination becomes effective unless Congress opposes it.

**Reports to Congress.** The NNPA (P.L. 95-242) also required the President to report annually to the Congress on federal efforts to prevent proliferation.<sup>55</sup> These reports have become known as the “Section 601” reports.<sup>56</sup> Among other things, they describe progress in U.S. efforts to encourage non-nuclear-weapon states not party to the NPT to adhere to the treaty or full-scope safeguards, and to foreswear the development of nuclear weapons, as well as progress in discouraging nuclear exports to non-nuclear-weapon states that have not taken such steps. The reports must also include a determination on which non-nuclear-weapon state recipients of U.S. nuclear exports have detonated a nuclear device, refused to accept full-scope IAEA safeguards on all peaceful nuclear activities, refused to give specific assurances that they will not manufacture or otherwise acquire any nuclear explosive device, or engaged in nuclear weapons-related work.<sup>57</sup> In short, the President must report to Congress if a recipient state has engaged in activities that would require a termination of exports under Section 129 of the AEA, as described above. The Section 601 reports must also describe implementation of nuclear and nuclear-related dual-use export controls. The most recent Section 601 report to Congress for the year ending

<sup>55</sup> 22 U.S.C. 3281 et seq.

<sup>56</sup> “Report to Congress Pursuant to Section 601 of the Nuclear Non-Proliferation Act of 1978, As Amended by the Nuclear Proliferation Prevention Act of 1994 for the Year Ending December 31, 2004.”

<sup>57</sup> 22 U.S.C. § 3281(a)(3).

2004 notes that none of the non-nuclear-weapon states that have U.S. agreements for cooperation in effect had engaged in any of the prohibited activities of Section 129 of the AEA. India is not described in that section since there is no agreement for cooperation in place now, but if the agreement is approved, the President would need to report specifically on India's nuclear weapons program.

**The Process.** The process of implementing an agreement under existing law would be, roughly, as follows:

- The President submits an exempted agreement for cooperation to Congress.
- The exempted agreement lies before Congress for 60 days of continuous session (once a Nuclear Proliferation Assessment Statement is received).<sup>58</sup>
- An exempted agreement only becomes effective if Congress enacts a joint resolution of approval.
- If the exempted agreement is approved, no congressional review of exports is required until 12 months after the first export has been licensed. Thereafter, an annual review is required per Section 128.
- President would have to waive Section 129 provisions which require cessation of exports.

**Amending the Atomic Energy Act.** The Administration might propose to the Congress to amend certain sections of the Atomic Energy Act. In Section 123, a potential provision to amend could be the full-scope safeguards requirement (Section 123 a. 2.). Taking out the full-scope safeguards requirement would open up the possibility of U.S. nuclear cooperation with states such as Pakistan and Israel, however. While some might argue that the costs of lowering the threshold for U.S. nuclear cooperation globally outweigh the benefits, others might argue that there are only three states outside the NPT now, and therefore, lowering the threshold is not that significant.

Another option would be simply to delete Section 128 of the AEA, which added the full-scope safeguards requirement for exports, particularly since other criteria for U.S. exports are already contained in Section 127. In addition, Section 129 could be amended to either change the effective date of the restriction so that nuclear testing after 2005 (rather than 1978) would trigger a cutoff (Section 129 (1) (A)), but this is unlikely to be sufficient, since India will continue its nuclear weapons activities that would trigger cessation of exports under Section 129 (1) (D). Or, Sections 128 and 129 could be eliminated.

**Stand-Alone Legislation.** One precedent for waiving nonproliferation sanctions is the so-called Brownback Amendment of 1999, which lifted nuclear testing sanctions for India and Pakistan. Senator Brownback offered his amendment to the Defense Appropriations Act of FY2000, which stated simply that sanctions contained in the Arms Export Control Act and the Export-Import Bank Act would not apply to India and Pakistan for any reason, effective for five years. The President

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<sup>58</sup> Specific procedures are found in AEA, P.L. 95-242, Sections 123 and 130.

could renew the suspension for an additional five years if he certified to Congress that it was in the national interest of the United States to do so. The final version, in PL 106-79, did not contain a time limit, but did contain a termination of the waiver in the event that either country tested another nuclear explosive device. A new bill to create an exception for India along these lines may be the most appealing option to the Administration.

Although it is not necessary for the Administration to provide a copy of the agreement for cooperation to the Congress at the same time that it submits proposed legislation, it is likely that Congress will want to review the actual proposed agreement for substance before it could pass a law excepting India from the current process. Under the Atomic Energy Act, Congress reviews the agreement and a nonproliferation assessment statement at the same time. Another consideration in assessing stand-alone legislation is whether it diminishes Congressional oversight of a peaceful nuclear cooperation agreement with India in contrast to existing provisions of law. It may be possible to draft language in stand-alone legislation that could seek to maintain such congressional prerogatives.

## Potential Issues for Congress

As the Administration consults with Congress over implementation of the U.S.-Indian nuclear cooperation agreement, Congress may want to consider several questions of substance:

- What level of intrusiveness, either in the process of separating India's civilian and military nuclear activities, or in an inspections regime, is sufficient to meet U.S. NPT obligations not to aid, assist, or encourage efforts to develop nuclear weapons?
- What is a credible and defensible separation plan?
- How should an additional protocol be implemented in India's case to maximize the IAEA's ability to detect diversion from the civilian sector to the military sector? What is the added value of the additional protocol, given the certainty that nuclear weapon facilities cannot be inspected?
- How well do India's export controls function?
- What are India's plans for its nuclear weapons program and what is the possibility that U.S. assistance could benefit that weapons program?
- If India is prepared to take on the responsibilities undertaken by other nuclear weapon states, is it prepared to stop producing fissile material for weapons? Is it prepared to declare some nuclear material as excess to its defense needs and place that material under IAEA safeguards? Is it prepared to sign the Comprehensive Test Ban Treaty?
- What impact will nuclear safeguards on civilian facilities have on India's transparency efforts with Pakistan?
- What would be the impact of NSG agreement to an exception for India before the U.S. Congress approves an agreement for cooperation?

- Are other countries' nuclear industries more likely to benefit from opening up nuclear cooperation with India than U.S. industries?

Ultimately, some of these issues might be addressed in a Nuclear Proliferation Assessment Statement, which the Administration is required to submit to the Congress along with the Section 123 agreement for cooperation, assuming the Administration complies with existing law.

If Congress chooses, it may attach conditions to approval of any agreement for cooperation. One precedent is the 1985 U.S.-China agreement for cooperation. As noted earlier, the U.S.-China agreement is the first U.S. peaceful nuclear cooperation agreement with another nuclear weapon state. The agreement contained certain restrictions on cooperation, but more importantly, Congress required the President to certify that a) reciprocal arrangements would ensure that nuclear materials, facilities or components would be used solely for peaceful purposes; b) China was not violating paragraph 2 of Section 129 (particularly with respect to assisting non-nuclear weapon states in a nuclear weapons program); and c) that U.S. approval for subsequent potential Chinese requests to enrich, reprocess or alter in any form material provided under the agreement would not be automatic.<sup>59</sup>

When the U.S.-China peaceful nuclear cooperation agreement was submitted to Congress in July 1985, the Arms Control and Disarmament Agency (ACDA) had concluded that China had met all the statutory requirements. On Section 129 of the Atomic Energy Act, ACDA concluded that "Based on the available information, it is believed that a finding under Section 129 that would preclude nuclear exports to China under the proposed Agreement is not warranted."<sup>60</sup> Nonetheless, a presidential certification on the three matters was not made until January 12, 1998. Reciprocal arrangements to ensure the peaceful uses of material, facilities, and components transferred were submitted to Congress for review and published in the *Federal Register*.

In the case of a U.S.-India nuclear cooperation agreement, it may be attractive to require similar certifications, particularly on the peaceful uses of U.S. technology and material. Other potential prerequisites for implementing an agreement could include completion of India's safeguards arrangements (including possibly subsidiary arrangements) with the International Atomic Energy Agency, executive branch certification of adequate transparency in the separation of India's civilian and military nuclear facilities, prior agreement by the Nuclear Suppliers Group for creating an exception for India, or substantive progress toward negotiating a fissile material production cutoff treaty.

Congress may also wish to consider certain issues related to its oversight of peaceful nuclear cooperation, should the Administration propose stand-alone legislation. Under existing law, Congress could review exports to India on an annual basis (Section 128), because the agreement itself would have to be exempted by the

<sup>59</sup> P.L. 99-183.

<sup>60</sup> Nuclear Proliferation Assessment Statement, page II-13 (reprinted in House Document 99-86, p. 41.)

President since it did not meet the full-scope safeguards criterion under Section 123. Stand-alone legislation that said that Sections 123 a (2), 128, and 129 of the Atomic Energy Act would not apply to peaceful nuclear cooperation with India would take away that annual Congressional review, as well as the provision that would halt U.S. nuclear exports if India tests a nuclear weapon again.